AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A compound of Formula I:

$$\begin{array}{c} X \\ H \\ N \\ O \\ \end{array}$$

$$\begin{array}{c} X \\ N \\ O \\ \end{array}$$

$$\begin{array}{c} X \\ N \\ \end{array}$$

$$\begin{array}{c} X \\ \\ X \\ \end{array}$$

$$\begin{array}{c} X \\$$

(Formula I)

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic carbamate, a eyelic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid derived group, and a phosphorus containing group —OR, —OSiH₃, —OSiRR'R", —OCOR, —OCOOR, —OCONHR, —OCSNHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H, —NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X', —SiH₃, —SiRR'R", —OCSOR, —OCO(CHR)_uCOOR, —OCO(CHR)_uSR', OCO(CHR)_uNR'R", —OCO(CHR)_uNR'R", —OCO(CHR)_uP(=O)(OH)(R'), cysteine, and glutathione,

$$P = 0^{-}$$
, $P = 0^{-}$, $P = R^{12}$, $P = R^{12}$

$$C = (CHR)_u$$
 $C = (CHR^{13})_u$
 $C = (CHR^{13})_u$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
, or

$$C \longrightarrow (CHR^{13})_{u} \longrightarrow R^{14}$$
;

wherein each of R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R^{16} and R^{17} is independently H; C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR^7 to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^7 is absent and Y is H, and, when the bond is a single bond, R^7 is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:

wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_2 4 alkyl; thiophenealkyl optionally substituted with methyl or halogen; C_6 - C_{14} aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted; wherein p is an integer that is greater than or equal to 2;

wherein each of R^3 , R^4 , and R^8 is independently a hydrogen; a C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, or C_2 - C_{24} alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof, wherein the compound is a solid.

2. (Currently Amended) A compound of Formula I:

$$R^{1}$$
 (R^{2})
 R^{1}
 (R^{6})
 (R^{6})

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic carbamate, a cyclic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid-derived group, and a phosphorus containing group —OR, —OSiH₃, —OSiRR'R", —OCOR, —OCOOR,

—OCONHR, —OCSNHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H,—
NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X⁻, —SiH₃,
—SiRR'R", —OCSOR, —OCO(CHR)_uCOOR, —OCO(CHR)_uSR', OCO(CHR)_uNR'R",
—OCO(CHR)_uP(=)R'R", —OCO(CHR)_uP(=O)(OH)(R'), cysteine, and glutathione,

$$C = (CHR)_{u} = C = (CHR^{13})_{u} = SR^{14}$$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
,
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
, or

$$C \longrightarrow (CHR^{13})_{\overline{u}} \longrightarrow R^{14}$$
;

wherein each of R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

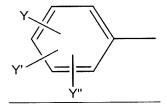
wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R¹⁶ and R¹⁷ is independently H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR^7 to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^7 is absent and Y is H, and, when the bond is a single bond, R^7 is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:



wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkynyl, C_1 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y'' is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_{24}

alkyl; thiophenealkyl optionally substituted with methyl or halogen; C₆-C₁₄ aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted;

wherein p is an integer that is greater than or equal to 2;

wherein each of R³, R⁴, and R⁸ is independently a hydrogen; a C₁-C₂₄ alkyl, C₂-C₂₄ alkenyl, or C₂-C₂₄ alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof;

provided that, when each of R^1 and R^5 is CH_2 attached by a double-bond, R^2 and R^6 are absent, R^3 and R^4 are CH_3 , R^7 is H, T^1 and T^2 are both O, Z is CH_2 , and p is 3, then X and Y are not both methoxy, both ethoxy, or both hydroxyl; and when each of R^1 , R^2 , R^5 , and R^6 are H, then X and Y are not both sulfide or both ether.

3. (Currently Amended) A compound of Formula I:

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic earbamate, a cyclic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid-derived group, and a phosphorus-containing group —OSiH₃, —OSiRR'R", —OCOR, —OCOOR, —OCOOR, —OCONHR, —OCSNHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H, —NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X⁻, —SiH₃, —SiRR'R", cysteine, and glutathione,

$$P = 0$$
, $P = 0$, $P = R^{12}$, $P = R^{12}$, $P = R^{12}$

$$C = (CHR)_u$$
 $C = (CHR^{13})_u$
 $C = (CHR^{13})_u$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$, or

wherein each of R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R¹⁶ and R¹⁷ is independently H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR^7 to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^7 is absent and Y is H, and, when the bond is a single bond, R^7 is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:

wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkenyl, C_1 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_{24} alkyl; thiophenealkyl optionally substituted with methyl or halogen; C_6 - C_{14} aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted; wherein p is an integer that is greater than or equal to 2;

wherein each of R^3 , R^4 , and R^8 is independently a hydrogen; a C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, or C_2 - C_{24} alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, <u>or</u> an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof.

- 4. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein X is selected from the group consisting of:
- (a) an amino acid-derived group having the structure:

NR'R"

$$R^9$$

O

NR'R"

 R^9

CHRCO₂H

 R^9

CHRCO₂H

wherein each of R, R', and R" R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle,

(b) a phosphoric group, a phosphorus group, a phosphonic acid group, or a phosphonous acid group having the structure: a group of the formula:

(i)

wherein $\Re \underline{R^{12}}$ is C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle, or

wherein $\Re \underline{R^{12}}$ is C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

(c)
$$\frac{\sim \sim 0 \quad O}{C \quad OR} \quad \frac{\sim \sim 0 \quad O}{C \quad OR^{13}},$$
(d)
$$\frac{\sim \sim 0 \quad O}{C \quad NH} \quad \frac{\sim \sim 0 \quad O}{R} \quad \frac{\sim \sim 0 \quad O}{R^{13}},$$

(e)
$$\frac{1}{C'-OR} = \frac{1}{C'-OR} = \frac{1}{C'-OR$$

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wherein, for each of structures (c) through (k), each of R, R', and R" R^{13} , R^{14} , and R^{15} is independently selected from the group consisting of H; C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is 1 to about 16;

(1) an amide having the structure:

wherein each of R and R' R^{16} and R^{17} is independently H; C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle, and

(m) a monohydroxylic or a polyhydroxylic group.

5. - 15. (Canceled).

- 16. (Currently Amended) The compound or a salt thereof of claim 1, wherein each of T^1 and T^2 is O, p is 3 and Z is -CH₂-.
- 17. (Currently Amended) The compound or a salt thereof of claim 1, wherein R^1 and R^2 are not both H.
- 18. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein each of \mathbb{R}^3 and \mathbb{R}^4 is a \mathbb{C}_1 - \mathbb{C}_8 alkyl optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, H, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl.

19.-20. (Canceled).

21. (Currently Amended) The compound or a salt thereof of claim 1, wherein R⁸ is H.

- 22.-23. (Canceled).
- 24. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein (a) each of X and Y is OH, (b) X is OH and Y is H, or (c) X is OR and R is an alkyl.
- 25.-26. (Canceled).
- 27. (Currently Amended) The compound <u>or a salt thereof</u> of claim 24, wherein X is OR and R is a C_1 - C_8 alkyl.
- 28.-29. (Canceled).
- 30. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein Y is the same as X.
- 31. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein the compound is selected from the group consisting of:

$$H_{2}C$$
 $H_{3}CH_{2}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CO$
 H_{3}
 $H_{3}CH_{2}CO$
 H_{3}
 $H_{3}CH_{2}CO$
 H_{3}
 $H_{3}CH_{2}CO$

$$H_3CH_2CO$$
 H_3CH_3CO
 H_3CO
 H_3CO
 H_3CO
 H_3CO
 H_2C
 H_2C

wherein, for structure (f), the following applies: R is an alkyl; a C_2 - C_{24} alkenyl; a cyclohexylalkyl; a C_3 - C_{26} alkoxyacetyl; a naphthalenalkyl optionally substituted with methyl or halogen; a phenyl (C_3 - C_{26} alkenyl), wherein the phenyl is optionally substituted with methyl or halogen; a cinnamyl; a pyridinealkyl optionally substituted with methyl or halogen;

a dihydropyridine alkyl optionally substituted with C_1 - C_{24} alkyl; a thiophenealkyl optionally substituted with methyl or halogen; an aryl; an allyl; a furanalkyl optionally substituted with methyl or halogen; cysteine; glutathione; or a group of structure

wherein each of Y and Y' is independently hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy or halogen.

32. - 36. (Canceled).

37. (Currently Amended) The compound <u>or a salt thereof</u> of claim 31, wherein the compound is of structure (f) and R is

and wherein each of Y and Y' is independently hydrogen, C_1 - C_8 alkyl, C_1 - C_8 alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_8 alkyl, C_1 - C_8 alkoxy or halogen.

38.-39. (Canceled).

40. (Currently Amended) The compound <u>or a salt thereof</u> of claim 1, wherein the compound is

wherein R is an $\underline{C_1}$ - $\underline{C_{24}}$ alkyl optionally substituted with an amino, hydroxyl, or thiol group; a $\underline{C_3}$ - $\underline{C_{24}}$ cycloalkyl; a $\underline{C_2}$ - $\underline{C_{24}}$ alkenyl; a eyelohexylalkyl; a $\underline{C_3}$ - $\underline{C_{26}}$ alkoxyacetyl; a naphthalenalkyl optionally substituted with methyl or halogen; phenyl ($\underline{C_2}$ - $\underline{C_{24}}$ alkenyl), wherein the phenyl is optionally substituted with methyl or halogen; cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridine alkyl optionally substituted with methyl or halogen; an aryl; an allyl; furanalkyl optionally substituted with methyl or halogen; or a group of structure

wherein each of Y and Y' is independently hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy or halogen.

41. - 47. (Canceled).

- 48. (Currently Amended) A pharmaceutical composition comprising a compound <u>or a salt</u> thereof of claim 1 and a pharmaceutically acceptable carrier.
- 49. 61. (Canceled).
- 62. (Currently Amended) A method of preparing the compound <u>or a salt thereof</u> of claim 1, wherein the compound is of Formula I

wherein X is OH,

wherein the bond between the carbon to which Y is attached and the N of NR⁷ to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R⁷ is absent and Y is H, and, when the bond is a single bond, R⁷ is H and Y is OH;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted;

wherein p is an integer that is greater than or equal to 2;

wherein each of R^3 , R^4 , and R^8 is independently a hydrogen; a C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, or C_2 - C_{24} alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, or an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof; and

wherein the compound is a solid; which method comprises:

(a) providing a compound of Formula II:

$$R^{1}$$

$$(R^{2})$$

$$R^{2}$$

$$(R^{2})$$

$$R^{3}$$

$$(R^{4}O$$

$$(R^{6})$$

$$(R^{5})$$

(Formula II)

wherein the definitions of R¹, R², R³, R⁴, R⁵, R⁶, T¹, T², Z, and p are the same as those for Formula I; and

(b) contacting the compound of Formula II with water, whereby the solid compound of Formula I is formed.

63.-67. (Canceled).

68. (Currently Amended) A method of preparing the compound <u>or a salt thereof</u> of claim 1, wherein the compound is of Formula I

$$\begin{array}{c} X \\ H \\ N \\ O \\ O \\ \end{array}$$

$$\begin{array}{c} X \\ O \\ \end{array}$$

$$\begin{array}{c} X \\ O \\ O \\ \end{array}$$

$$\begin{array}{c} X \\ O \\ \end{array}$$

(Formula I)

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic carbamate, a cyclic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid-derived group, and a phosphorus containing group —OR, —OSiH₃, —OSiRR'R", —OCOR, —OCOOR, —OCOOR, —OCONHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H, —NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X⁻, —SiH₃, —SiRR'R", —OCSOR, —OCO(CHR)_uCOOR, —OCO(CHR)_uSR', OCO(CHR)_uNR'R", —OCO(CHR)_uP(=O)R'R", —OCO(CHR)_uP(=O)(OH)(R'), cysteine, and glutathione,

$$R^9$$
 NR^{10}
 $NR^{10}R^{11}$
 $NR^{10}R^{11}$

$$P = 0^{-}$$
, $P = 0^{-}$, $P = R^{12}$, $P = R^{12}$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$, or

$$C \longrightarrow (CHR^{13})_{u} \longrightarrow R^{14}$$
;

wherein each of R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R^{16} and R^{17} is independently H; C_1 - C_8 alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR^7 to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^7 is absent and Y is H, and, when the bond is a single bond, R^7 is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:

wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkynyl, C_1 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_{24} alkyl; thiophenealkyl optionally substituted with methyl or halogen; C_6 - C_{14} aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted;

Swherein wherein p is an integer that is greater than or equal to 2;

wherein each of R^3 , R^4 , and R^8 is independently a hydrogen; a C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, or C_2 - C_{24} alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, <u>or</u> an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, and aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, or an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, and aryl, and a heterocycle;

or a salt thereof; and
wherein the compound is a solid;
which method comprises:

(a) providing a compound of Formula II:

$$R^{1}$$
 (R^{2})
 (R^{2})
 (R^{3})
 (R^{4})
 (R^{6})

(Formula II)

wherein the definitions of R¹, R², R³, R⁴, R⁵, R⁶, T¹, T², Z, and p are the same as those for Formula I; and

- (b) combining the compound of Formula II with a nucleophilic organic reactant, wherein the nucleophilic part of the nucleophilic organic reactant provides X, whereby the solid compound of Formula I is formed.
- 69. (Currently Amended) A method of preparing the compound <u>or a salt thereof</u> of claim 2, wherein the compound is of Formula I

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic carbamate, a cyclic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid-derived group, and a phosphorus-containing group —OR, —OSiH₃, —OSiRR'R", —OCOR, —OCOOR, —OCOOR, —OCONHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H, —NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X', —SiH₃, —SiRR'R", —OCSOR, —OCO(CHR)_uCOOR, —OCO(CHR)_uSR', OCO(CHR)_uNR'R", —OCO(CHR)_uP(=)R'R", —OCO(CHR)_uP(=O)(OH)(R'), cysteine, and glutathione,

$$P = 0^{-}$$
, $P = 0^{-}$, $P = R^{12}$, $P = R^{12}$, $P = R^{12}$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$

wherein each of R^9 , R^{10} , and R^{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R¹⁶ and R¹⁷ is independently H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR^7 to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^7 is absent and Y is H, and, when the bond is a single bond, R^7 is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:

wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_{24} alkyl; thiophenealkyl optionally substituted with methyl or halogen; C_6 - C_{14} aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted; wherein p is an integer that is greater than or equal to 2;

wherein each of R³, R⁴, and R⁸ is independently a hydrogen; a C₁-C₂₄ alkyl, C₂-C₂₄ alkenyl, or C₂-C₂₄ alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, <u>or</u> an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, <u>or</u> an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof; and

provided that, when each of R^1 and R^5 is CH_2 attached by a double-bond, R^2 and R^6 are absent, R^3 and R^4 are CH_3 , R^7 is H, T^1 and T^2 are both O, Z is CH_2 , and p is 3, then X and Y are not both methoxy, both ethoxy, or both hydroxyl; and when each of R^1 , R^2 , R^5 , and R^6 are H, then X and Y are not both sulfide or both ether;

which method comprises:

(a) providing a compound of Formula II:

$$R^{1}$$
 (R^{2})
 R^{5}

(Formula II)

wherein the definitions of R¹, R², R³, R⁴, R⁵, R⁶, T¹, T², Z, and p are the same as those for Formula I; and

(b) combining the compound of Formula II with a nucleophilic organic reactant other than methanol or ethanol, wherein the nucleophilic part of the nucleophilic organic reactant provides X,

whereby the solid compound of Formula I is formed.

70. (Currently Amended) A method of preparing the compound <u>or a salt thereof</u> of claim 3, wherein the compound is of Formula I

wherein X is a substituent selected from the group consisting of an OH, an ether, a silyl ether, a trialkyl silyl ether, an ester, a carbonate, a carbamate, a thiocarbamate, a cyclic carbamate, a cyclic thiocarbamate, an acetate, SH, a sulfide, a sulphoxide, a sulphone, a sulphite, a bisulphite, a sulphonamide, an amine, an amide, an azido, a cyano, a halo, a triphenylphosphonium, a silyl, a trialkyl silyl, an amino acid derived group, and a phosphorus-containing group —OSiH₃, —OSiRR'R", —OCOR, —OCOOR, —OCOOR, —OCONHR, —OCSNHR, —SH, —SR, —SOR, —SOOR, —OSO₂R, —OSO₂H, —NHSOOR, —NH₂, —NHR, —NRR', —N₃, —CN, halogen, —P⁺Ph₃ X⁻, —SiH₃, —SiRR'R", cysteine, and glutathione,

$$P = 0^{-}$$
, $P = 0^{-}$, $P = R^{12}$, $P = R^{12}$, $P = R^{12}$

$$C = (CHR^{13})_{u} = NR^{14}N^{15}$$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$
 $C = (CHR^{13})_{u} = PR^{14}R^{15}$

wherein each of R^9 , R_{10} , and R_{11} is independently selected from the group consisting of H, a C_1 - C_8 alkyl optionally substituted with an amine or a carboxylate; an aryl; an aryl alkyl; and a heterocycle;

wherein R^{12} is C_1 - C_8 optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle,

wherein each of R¹³, R¹⁴, and R¹⁵ is independently selected from the group consisting of H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; and a heterocycle, and wherein u is an integer from 1 to about 16,

wherein each of R¹⁶ and R¹⁷ is independently H; C₁-C₈ alkyl optionally substituted with an aryl, a heterocycle, an alkoxy, a halo, an amine, or carboxylate; an aryl; or a heterocycle; a monohydroxylic or a polyhydroxylic group;

wherein the bond between the carbon to which Y is attached and the N of NR⁷ to which the carbon is attached is a single bond or a double bond, wherein, when the bond is a double bond, R⁷ is absent and Y is H, and, when the bond is a single bond, R⁷ is H and Y is a substituent selected from the group defined for X, wherein Y is optionally the same as X;

wherein each of T¹ and T² is independently O, S, or NR⁸;

wherein R, R', and R" are independently selected from the group consisting of C_1 - C_{24} alkyl optionally substituted with an amino, hydroxyl, or thiol group, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{26} alkoxyacetyl, and a group of the structure:

wherein Y and Y' are independently hydrogen, C_1 - C_{24} alkyl, arylalkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkenyl, C_1 - C_{24} alkoxy, halogen, or Y and Y' taken together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen; naphthalenalkyl optionally substituted by methyl or halogen; phenyl(C_2 - C_{24} alkenyl); cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridinealkyl optionally substituted with C_1 - C_{24} alkyl; thiophenealkyl optionally substituted with methyl or halogen; C_6 - C_{14} aryl; allyl; and furanalkyl optionally substituted with methyl or halogen;

wherein Z is a divalent radical of an alkane, an alkene, or an alkyne, any of which optionally contains a heteroatom or carbonyl and any of which is substituted or unsubstituted; wherein p is an integer that is greater than or equal to 2;

wherein each of R^3 , R^4 , and R^8 is independently a hydrogen; a C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, or C_2 - C_{24} alkynyl, optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl;

wherein the bond between R^1 and the carbon to which R^1 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^2 is absent and R^1 is a divalent radical derived from an alkane, or an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^1 and R^2 are independently selected from the group consisting of H, C_1 - C_8 alkyl, and aryl, and a heterocycle; and

wherein the bond between R^5 and the carbon to which R^5 is attached is a single bond or a double bond, wherein, when the bond is a double bond, R^6 is absent and R^5 is a divalent radical derived from an alkane, an aromatic hydrocarbon, or a heterocycle, and when the bond is a single bond, R^5 and R^6 are independently selected from the group consisting of H, C_1 - C_8 alkyl, aryl, and a heterocycle;

or a salt thereof; and which method comprises:

(a) providing a compound of Formula II:

$$R^{1}$$

$$(R^{2})$$

$$N$$

$$OR^{3} R^{4}O$$

$$(R^{6})$$

$$R^{5}$$

wherein the definitions of R¹, R², R³, R⁴, R⁵, R⁶, T¹, T², Z, and p are the same as those for Formula I; and

(Formula II)

(b) combining the compound of Formula II with a nucleophilic organic reactant, wherein the nucleophilic part of the nucleophilic organic reactant provides X, and whereby the solid compound of Formula I is formed.

71. - 80. (Canceled).

81. (Currently Amended) The compound or a salt thereof of claim 1, wherein X is selected from the group consisting of $OR^9 OR$, $SR^{10} SR$, or an amine; wherein each of R^9 and

 \underline{R}^{10} is independently a hydrogen, an $\underline{a} \ \underline{C_{1}} - \underline{C_{24}}$ alkyl, or a substituted or unsubstituted phenyl or a group of structure

wherein each of Y and Y' is independently hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy or halogen; wherein the bond between the carbon to which Y is attached and the N of NR⁷ to which the carbon is attached is a single bond; wherein Y is the same as X; wherein each of T¹ and T² is O; wherein Z is a divalent radical of an alkane; wherein p is 3; wherein each of R³ and R⁴ is independently a hydrogen or a C_1 - C_{24} alkyl; wherein the bond between R¹ and the carbon to which R¹ is attached is a single bond; and wherein the bond between and the carbon to which R⁵ is attached is a single bond.

- 82. (Currently Amended) The compound or a salt thereof of claim 2, wherein each of T^1 and T^2 is O, p is 3 and Z is -CH₂-.
- 83. (Currently Amended) The compound <u>or a salt thereof</u> of claim 2, wherein each of \mathbb{R}^3 and \mathbb{R}^4 is a \mathbb{C}_1 - \mathbb{C}_4 alkyl optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl.
- 84. (Previously Presented) The compound <u>or a salt thereof</u> of claim 2, wherein (a) each of X and Y is OH, (b) X is OH and Y is H, or (c) X is OR and R is an $\underline{a} \ C^1 C^{24}$ alkyl.
- 85. (Currently Amended) The compound <u>or a salt thereof</u> of claim 83, wherein X is OR and R is methyl, ethyl, isopropyl, or *t*-butyl.
- 86. (Currently Amended) The compound <u>or a salt thereof</u> of claim 2, wherein the compound is selected from the group consisting of:

wherein, for structure (c), the following applies: R^{16} is an alkyl; a C_2 - C_{24} alkenyl; a eyelohexylalkyl; a C_3 - C_{26} alkoxyacetyl; a naphthalenalkyl optionally substituted with methyl or halogen; a phenyl (C_3 - C_{26} alkenyl), wherein the phenyl is optionally substituted with methyl or halogen; a cinnamyl; a pyridinealkyl optionally substituted with methyl or halogen; a dihydropyridine alkyl optionally substituted with C_1 - C_{24} alkyl; a thiophenealkyl optionally substituted with methyl or halogen; an aryl; an allyl; a furanalkyl optionally substituted with methyl or halogen; cysteine; glutathione; or a group of structure

wherein each of Y and Y' is independently hydrogen, C₁-C₂₄ alkyl, C₁-C₂₄ alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C₁-C₂₄ alkyl, C₁-C₂₄ alkoxy or halogen.

87. (Currently Amended) The compound <u>or a salt thereof</u> of claim 2, wherein the compound is

wherein R^{17} is an alkyl; a cycloalkyl; a C_2 - C_{24} alkenyl; a cyclohexylalkyl; a C_3 - C_{26} alkoxyacetyl; a naphthalenalkyl optionally substituted with methyl or halogen; phenyl (C_2 - C_{24} alkenyl), wherein the phenyl is optionally substituted with methyl or halogen; cinnamyl; pyridinealkyl optionally substituted with methyl or halogen; dihydropyridine alkyl optionally substituted with methyl or halogen; an aryl; an allyl; furanalkyl optionally substituted with methyl or halogen; or a group of structure

wherein each of Y and Y' is independently hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy, or halogen, or Y and Y' together form 3,4-methylenedioxy, and Y" is hydrogen, C_1 - C_{24} alkyl, C_1 - C_{24} alkoxy or halogen.

88. (Currently Amended) A pharmaceutical composition comprising a compound <u>or a salt</u> thereof of claim 2 and a pharmaceutically acceptable carrier.

89.-90. (Canceled)

- 91. (Currently Amended) The compound or a salt thereof of claim 3, wherein each of T^1 and T^2 is O, p is 3 and Z is -CH₂-.
- 92. (Currently Amended) The compound <u>or a salt thereof</u> of claim 3, wherein each of \mathbb{R}^3 and \mathbb{R}^4 is a \mathbb{C}_1 - \mathbb{C}_4 alkyl optionally substituted with a group selected from the group consisting of an aryl, a heterocycle, and an amine; or an aryl optionally substituted with an alkyl, an aryl, an alkoxy, a halo, an amine, a hydroxy, or a trifluoromethyl.
- 93. (Currently Amended) A pharmaceutical composition comprising a compound <u>or a salt</u> <u>thereof</u> of claim 3 and a pharmaceutically acceptable carrier.

94.-95. (Canceled)

- 96. (New) A method of treating cancer in a host comprising administering to a host a compound or a salt thereof of claim 1 in an amount effective to treat cancer in the host, wherein the cancer is leukemia, non-small cell lung cancer, colon cancer, cancer of the central nervous system, melanoma, ovarian cancer, renal cancer, prostate cancer, or breast cancer.
- 97. (New) The method or a salt thereof of claim 96, wherein the host is a human.
- 98. (New) The method or a salt thereof of claim 96, wherein the compound is administered as an injectable formulation.
- 99. (New) A method of treating cancer in a host comprising administering to a host a compound or a salt thereof of claim 2 in an amount effective to treat cancer in the host, wherein the cancer is leukemia, non-small cell lung cancer, colon cancer, cancer of the central nervous system, melanoma, ovarian cancer, renal cancer, prostate cancer, or breast cancer.
- 100. (New) The method of claim 99, wherein the host is a human.

- 101. (New) The method of claim 99, wherein the compound is administered as an injectable formulation.
- 102. (New) A method of treating cancer in a host comprising administering to a host a compound or a salt thereof of claim 3 in an amount effective to treat cancer in the host, wherein the cancer is leukemia, non-small cell lung cancer, colon cancer, cancer of the central nervous system, melanoma, ovarian cancer, renal cancer, prostate cancer, or breast cancer.
- 103. (New) The method of claim 102, wherein the host is a human.
- 104. (New) The method of claim 102, wherein the compound is administered as an injectable formulation.